REMARKS

I. Introduction

In response to the Office Action dated September 1, 2009, please amend claim 24 and add claims 25-31 as follows. Claims 1-31 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Allowable Subject Matter

In paragraph 7, the Office Action indicates that the subject matter of claim 24 would be allowable if written in independent form including all of the limitations of the base claim and any intervening claims. The Applicant has amended claim 24 to recite the features of claim 1. Further, the Applicant has added new claims 25-31, which recite the features of claims 2-4 and 20-23. Accordingly, the Applicants believe that claims 24-31 are currently in condition for allowance.

III. The Cited References and the Subject Invention

A. The Szymanski Reference

U.S. Patent No. 6,148,081, issued November 14, 2000 to Szymanski discloses a security model for interactive television applications. The system and method is implemented in an interactive television system and restricting or controlling the access rights of interactive television applications and carousels. The system broadcasts modules from a broadcast station to a plurality of receiving stations, which execute applications containing the modules. In one embodiment, the applications utilize a credential consisting of a producer identification number (ID) and an application ID for each of the grantor and grantee applications, an expiration date, a set of permission data, a producer certificate and a signature. An application requesting access and a carousel granting access may be identified by respective producer and application IDs. The credential utilizes public key encryption to ensure the integrity of the credential. The producer and application IDs may be replaced with wildcards so that rights may be granted to a group of producers or applications.

B. The Liao Reference

The document "The Split and Merge Protocol for Interactive Video-on-Demand" authored by Wanjiun Liao and Victor O.K. Li describes a system wherein when a user selects VCR-like user

functions from a batch video stream, the user is temporarily assigned to a new video stream that the user can used to perform any desired interactions. When the user is done, they are merged back into the nearest ongoing video stream.

C. The Spies Reference

U.S. Patent No. 6,055,314, issued April 25, 2000 to Spies discloses a system and method for secure purchase and delivery of video content programs. The system and method allows secure purchase and delivery of video content programs over various distribution media, including distribution networks and digital video disks, includes an integrated circuit card (e.g., a smart card, PCMCIA card) which is configured to store decryption capabilities for related video programs. The decryption capabilities are initially kept in a secure store at a video merchant. When a purchaser orders a particular video program, the decryption capabilities for that program are downloaded to the IC card, either at the merchant premises or over a distribution network. The video content program is distributed in encrypted format via the distribution media to the purchaser. The IC card uses the decryption capabilities to at least partly decrypt the video content program without exposing the decryption capabilities.

D. The Gorbatov Reference

U.S. Publication No. 20030018980, published January 23, 2003 to Gorbatov et al. disclose a method and apparatus for selective recording of television programs using event notifications. Improved enhanced TV programming provides the capability for event driven recording of TV programs and program segments. Recording a selected program segment of a digital TV program includes receiving a digital TV stream including the digital TV program, automatically starting recording of the selected program segment of the digital TV program when a first event notification is received, and automatically stopping recording of the selected program segment when a second event notification is received.

E. The Kahn Reference

U.S. Publication No. 20080019529, published January 24, 2008 to Kahn et al. disclose distribution of video content using client to host pairing of integrated receivers/decoders. A host receiver and a client receiver are operatively in a direct broadcast satellite system. Program materials received by the host receiver from the direct broadcast satellite system are decrypted by the host

receiver. The decrypted program materials are then encrypted at the host receiver using a copy protection key. The copy protection key is encrypted at the host receiver using a host-client pairing key shared between the host receiver and client receiver. The encrypted program materials and the encrypted copy protection key are transferred from the host receiver to the client receiver. The transferred copy protection key is decrypted at the client receiver using the host-client pairing key. The transferred program materials are then decrypted at the client receiver using the decrypted copy protection key.

F. The Ullrich Reference

U.S. Patent No. 5,583,937, issued December 10, 1996 to Ullrich et al. disclose a method for providing video programming nearly on demand. A method for providing video programming in a nearly on demand basis is disclosed. A video network includes a video server that operates several video recorders to simultaneously exhibit video performances or programs on a plurality of channels. The video server is controlled in real time in accordance with data presented to it in an exhibition plan. The exhibition plan calls for two or more channels to show the same program on a time offset basis. Due to the offset in exhibiting a given program, a subscriber may view a program at any time, from the beginning of a program, by waiting for a period of time that is no longer than the offset. Preferably, this offset is substantially shorter than the run time of the program. The channels carrying this program are unscrambled prior to the beginning of the program and for a predetermined duration into the program so that subscribers may preview the program. However, the channels are scrambled for the remainder of the exhibition of the program. A subscriber may order the program when it begins and for a short duration after the program becomes scrambled.

IV. Office Action Prior Art Rejections

In paragraph (3), the Office Action rejected claims 1-4, 10-12, and 20-23 under 35 U.S.C. §103(a) as being unpatentable over Szymanski in view of Liao, in view of Spies, and in view of Gorbatov et al., U.S. Publication No. 20030018980 (Gorbatov). The Applicant respectfully traverses these rejections

Claim 1 recites:

> *A method of providing a video program in response to a demand by a subscriber, wherein the video program is repeatedly transmitted on one of a plurality of channels by*

a headend, each repeated transmission separated from a previous transmission by a predetermined period of time, the method comprising the steps of:

inserting a trigger into the video program at a predetermined transition point;

delivering a first portion of the one video program available for viewing on demand;

storing the first portion of the video program as unencrypted data on a digital video recorder (DVR);

offering the video program for purchase by the subscriber;

accepting a subscriber demand to purchase the complete video program;

retrieving the stored first portion of the at least one video program from the DVR after accepting a subscriber demand to purchase the complete video program;

authorizing capture and decryption of a remaining portion of purchased video program from the headend;

switching from the stored first unencrypted portion of the at least one video program to the remaining portion of the purchased video program at a time indicated by the trigger.

According to the Office Action,

> but, Szymanski does not explicitly disclose,
>
> - "the video program is repeatedly transmitted on one of a plurality of channels by a headend, each repeated transmission separated from a previous transmission by a predetermined period of time," although Gorbatov et al. do suggest a headend and typical transmissions comprising multiple parts sent at different intervals, as recited below;

Claim 1 recites that the video program is repeatedly transmitted on one of a plurality of channels, each repeated transmission separated from a previous transmission by a predetermined period of time. The Office Action cites the following portions of Gorbatov:

- "...Enhanced content extracted from a DTV broadcast signal may include a variety of enhanced TV resources such as ATVEF triggers to update information displayed on a visual display (such as the screen of TV 10 or another monitor), Universal Resource Locators (URLs), metadata, scripts, Java applets, HTML, web pages, images, or other useful data..." [page 2 para 0014];
- "...Broadcast head-end 18 broadcasts the DTV signal to the set top box 12 over the broadcast network 14 using well known methods...The broadcast head-end may also be known as a transport operator...runs a video delivery infrastructure that includes a transport for ATVEF data. The enhanced TV stream 20 may be created by a content creator (not shown). The content creator originates the content components of the enhancement including audio, video, graphics, layout, interaction and triggers. The content creator creates the enhanced TV stream to comprise the TV content 22 (e.g., one or more TV programs having at least audio and video portions) and zero or more ATVEF triggers 24..." [page 2 para 0016];

However, none of the foregoing discloses or suggests repeated transmission of a media program, nor does it disclose that each repeated transmission is separated from a previous transmission by a predetermined period of time.

The Office Action further acknowledges that Szymanski does not teach:

- "switching from the stored first unencrypted portion of the at least one video program to the remaining portion of the purchased video program at a time indicated by the trigger," although Liao et al. do suggest splitting a user off from an original batch and assigning the user to a new video stream, as recited below;

The cited portion of Liao refers to a method for providing VOD service by temporarily splitting a user entering a VOD command (e.g. fast forward or rewind) to a different video stream. This is not performed in response to a trigger, let alone a trigger inserted at a predetermined transition point, as recited in claim 1. Indeed, the whole point of Liao is allow the user to rewind or fast-forward wherever they may want to ... not at a predetermined transition point.

Further, the triggers discussed in Gorbatov do not refer to anything that is used to transition from a stored portion of a media program to a remaining portion of a video program. Instead, this feature appears to be used to indicate enhanced TV content:

> **[0017]** ATVEF triggers are described in the ATVEF Specification in section **1.1.5**.
>
> **[0018]** Triggers are real-time events delivered for an enhanced TV program. In one embodiment, a trigger may be included in a single Internet Protocol (IP) multicast packet delivered on the address and port defined in an announcement for an enhanced TV program. In another embodiment for analog TV, triggers may be transmitted on vertical blanking interval (VBI) line **21** of a National Television Standards Committee (NTSC) television signal. ATVEF Receiver **16** may set a policy for allowing users to turn on or turn off enhanced TV content, and can use a trigger arrival as a signal to notify users of enhanced content availability. Triggers may include a URL, and may optionally include a human-readable name, an expiration date, and a script. The ATVEF Receiver determines how to interpret triggers received from the broadcast head-end. In the present invention, the ATVEF Receiver may interpret a received trigger as an event notification of a program segment of interest being broadcast on a channel.

Claims 2-4 recite the features of claim 1 and are patentable for the same reasons.

With Respect to Claims 10-12: Claim 10 recites the features of claim 5, and also recites the insertion and use of triggers in the DVR to switch from the stored unencrypted portions to the remaining portions of the program. As described above, the triggers of Gorbatov are not used for this purpose.

With Respect to Claims 20-23: Claims 20-23 recite the features of claim 1 and are patentable on the same basis.

In paragraphs (1)-(2), the Office Action rejected claims 5-9 under 35 U.S.C. § 103(a) as unpatentable over Szymanski, U.S. Patent No. 6,148,081 (Szymanski) in view of Liao et al., "The Split and Merge Protocol for Interactive Video-on-Demand," (Liao) and further in view of Spies, U.S. Patent No. 6,055,314 (Spies). The Applicants respectfully traverse these rejections.

With Respect to Claim 5: Claim 5 recites:

> *A method of purchasing a program on demand comprising the steps of:*
> *receiving a first unencrypted portion of the program for purchase from a headend;*
> *storing the received first unencrypted portion of the program for later purchase on a subscriber's digital video recorder;*
> *offering the program for purchase;*
> *selecting the program for purchase;*
> *retrieving the stored first unencrypted portion of the selected program from the subscriber's digital video recorder for viewing by the subscriber;*
> *receiving a remaining portion of the selected program from the headend;*

authorizing storage of the program by the subscriber's digital video recorder according to a subscription service level;

if the storage of the program is authorized, splicing the first unencrypted portion of the selected program with the remaining portion of the selected program to form a complete program;

storing the complete program on the digital video recorder for a predetermined period of time.

Szymanski teaches an interactive TV system that transmits, along with the audio and video information, interactive application modules that can be used to support interactive television. One such module may allow the user to make purchases via credit card applications. However, Szymanski does not teach receiving and storing a first unencrypted portion of a media program for later purchase on a subscriber's DVR. The Office Action indicates that this is disclosed as follows:

> The interactive functionality of the television is controlled by a set-top box connected to the television. The set-top box receives the signal transmitted by the broadcast service provider, separates the interactive portion from the audio-video portion and decompresses the respective portions of the signal. The set-top box uses the interactive information, for example, to execute an application while the audio-video information is transmitted to the television. The set-top box may combine the audio-video information with interactive graphics or audio generated by the interactive application prior to transmitting the information to the television. The interactive graphics and audio may present additional information to the viewer or may prompt the viewer for input. The set-top box may provide viewer input or other information to the broadcast service provider via a modem connection.

However, this fails to disclose a DVR, and also fails to disclose storing an unencrypted portion of a video program for later purchase.

Claim 5 recites "offering the program for purchase." The Office Action indicates that this feature is disclosed in Szymanski as follows:

> In one embodiment, the producer of a carousel may create a credential which is intended to allow selected applications to initiate or terminate execution of the application stored in the carousel. For example, the carousel may comprise an electronic commerce application which allows interactive television users to make purchases via credit card transactions. Certain online shopping applications may be authorized to initiate the credit card transaction application in order to make purchases. These same applications, or possibly a different set of applications, may be authorized to terminate the credit card transaction application if it stalls or cannot complete the transaction. The applications which initiated the credit card application could thereby regain control and resume execution in spite of the inability to complete the credit card transaction.

But this is not the case. The foregoing refers to an application program that allows the user to make credit card purchases. It does not refer to offering *the program* for purchase, as recited in claim 5.

Claim 5 recites "if the storage of the program is authorized, splicing the first unencrypted portion of the selected program with the remaining portion of the selected program to form a complete program." The Office Action indicates that this feature is found as follows:

> a set-top box. Set-top box **22** processes the packetized signal to reconstruct the television programs and interactive applications embodied in the signal. The reconstructed applications are executed in the set-top box, while the reconstructed television programs are passed to the television, where they are displayed. The interactive applications may generate graphics or audio which are combined with the television program prior to being displayed.

but all this discloses is that the reconstructed applications are sent to the set-top box, while the reconstructed programs are sent to the television. There is no notion of splicing the first portion of the media program with a remaining portion *if storage of the program is authorized.* There is also no notion of splicing the first portion with a portion received from the headend.

Claim 5 also recites "storing the complete program on the digital video recorder for a predetermined period of time." The Office Action suggests that this features is disclosed in Szymanski as follows:

> Set-top box **22** demultiplexes the packets, separating the packets containing module data from packets containing audio and video for television programs. The module management unit detects module packets and determines whether these packets correspond to modules needed by the executing application. The set-top box then reconstructs the modules from the corresponding packets and reconstructs the television programs from the packets containing the associated audio and video data. As explained above, the modules are stored in **RAM 37**, where they are available for use by applications executing in the control unit **35**.

But this simply refers to the operations used to reconstruct a media program from audio and video packets. It does not refer to storing the program for a predetermined time.

Claim 5 also recites authorizing storage of the program by a subscribers DVR according to a subscription service level. The Office Action indicates that Spies suggests usage of an IC card for authentication, but claim 5 recites more than just authentication.

For all the foregoing reasons, the Applicants respectfully traverse the rejection of claim 5.

Claims 6-12 recite the features of claim 5 and are patentable for the same reasons. Claims 6-12 also recite further features rendering them even more remote from the cited references. For example, claim 10 recites the insertion of triggers that are used to switch from the stored portions of the program to the remaining portions of the program.

In paragraph (4), the Office Action rejected claims 13 and 16 under 35 U.S.C. §103(a) as being unpatentable over Szymanski in view of Liao and in view of Kahn et al., U.S. Publication No. 20080019529 (Kahn).

The Applicant notes that the Kahn reference was published January 24, 2008, and was not publicly known or used before the filing date of the instant application, and hence is a prior art reference only under 35 U.S.C. § 102(e). The Applicants hereby submit a statement of common ownership, thus obviating the Kahn reference from application under 35 U.S.C. § 103(a):

U.S. Patent Application Serial No. 10/790,466 and U.S. Patent Publication No. 2008/0019529 were, at the time the invention of U.S. Patent Application Serial No. 10/790,466 was made, both owned by Hughes Electronics Corporation.

Claims 14-19 depend on claim 13 and are patentable for the same reasons.

V. Dependent Claims

Dependent claims 2-4, 6-12, and 14-23 incorporate the limitations of their related independent claims, and are therefore patentable on this basis. In addition, these claims recite novel

elements even more remote from the cited references. Accordingly, the Applicants respectfully request that these claims be allowed as well.

VI. New Claims

As described above, the Applicants have amended claim 24 to place it in allowable form. Claims 25-31 recite the features of claim 24 and are allowable on the same basis.

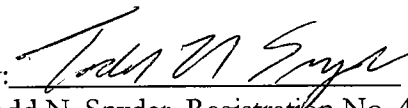
VII. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Should any fees be associated with this submission, please charge Deposit Account 50-0383.

Respectfully submitted,

Date: November 30, 2009

By: 
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